

3 June 1996

a
add
what is Claimed to
add
By
~~Patent Claims~~

1. Surfboard having an essentially elongate, flat basic body which is capable of floating and, during use, rests with its underside on the water, and on whose upper side there is provided a standing surface for the feet of the sports person using the board, at least one fin being attached to the underside, characterized in that an opening extending from the underside towards the upper side is provided in the basic body for receiving the said fin.
 2. Surfboard according to Claim 1, characterized in that the extent of the said opening in the transverse direction of the board, that is to say transversely to the direction of travel and transversely to the surface plane of the fin, is less than the cross-section of the fin, and in that the outer edges of the fin cross-section at the connection point to the board are designed in such a way that the outer edges rest essentially completely against the underside of the board.
 3. Surfboard according to Claim 1 or 2, characterized in that the fin is attached in the said opening by an attachment means.
 4. Surfboard according to Claim 1, 2 or 3, characterized in that the said opening has a longitudinal extent essentially in the longitudinal direction of the board, which is greater than the extent of the attachment means in the longitudinal direction, so that the attachment means and the fin can be moved in the longitudinal direction in the said opening when the said attachment means has been loosened.
 5. Surfboard according to Claim 3 or 4, characterized in that the said attachment means is a screw which is provided with a screw head, and in that the said opening has a resting surface on which the said screw head rests in order to hold the said fin.
-
- 16*

6. Surfboard according to at least one of Claims 1 to 5, characterized in that the said opening is designed in the form of a fin box which penetrates the said basic body..

7. Surfboard according to Claim 6, characterized in that the said fin box has a box top part which is open towards the upper side of the surfboard, and a box bottom part which is open towards the underside of the said surfboard, and in that a plate is arranged between the said fin top box and the said fin bottom box, in which plate the said opening is provided, and through which the said attachment means engages.

8. Apparatus according to Claim 7, characterized in that the said box top part consists of two opposite side walls which are arranged essentially parallel to the longitudinal direction of the surfboard and which are connected to one another by two shorter cross walls.

9. Surfboard according to at least one of Claims 6 to 8, characterized in that the said box bottom part has two longitudinal walls running essentially parallel to the longitudinal direction of the surfboard and two short cross walls which connect the latter.

10. Apparatus according to at least one of Claims 1 to 9, characterized in that the said fin has a journal which engages in the said opening.

11. Apparatus according to Claim 10, characterized in that the said journal is of essentially cuboid design, and in that the said opening in the said box bottom part is designed in such a way that, in the assembled state of the said fin, the side walls of the said journal rest essentially against the side walls of the said fin box.

12. Apparatus according to at least one of Claims 1 to 11, characterized in that a seal is provided between the surface of the fin, which faces the underside of the surfboard, and the surfboard.

13. Apparatus according to at least one of Claims 1 to 12, characterized in that an opening provided with a threaded bore is provided in the said fin for engagement of an attachment means provided with a threaded bore.

14. Method for the manufacture of a surfboard having an essentially elongate, flat basic body which is capable of floating and, during use, rests with its underside on the water, and on whose upper side there is provided a standing surface for the feet of the sports person using the board, characterized in that an opening extending from the underside towards the upper side is provided in the basic body for receiving a fin, the said opening being formed in a moulding which is manufactured independently of the surfboard and which is integrated therein during the manufacture of the surfboard.

15. Method according to Claim 14, characterized in that the surfboard is manufactured by the said moulding being inserted into a mould which has a mould cavity which essentially corresponds to the shape of the said basic body, and in that, after the said moulding has been inserted into the mould, the mould is closed, a foaming medium being introduced into the mould before, during or after the closure of the mould, which foaming medium expands in the mould cavity and, in the process, essentially forms the said basic body.

16. Method according to Claim 15, characterized in that the said foaming medium is of such a type and is introduced into the said mould cavity in such a quan-

tity that the foam produced essentially completely forms the said basic body.

17. Method according to Claim 15, characterized in that at least one body consisting of plastic material which, in the finished state, forms at least part of the outer surface of the surfboard, is placed in the said mould.

18. Method for the manufacture of a surfboard according to one of Claims 13 to 17, characterized in that the said moulding is designed as a fin box, and in that the said fin box is manufactured from plastic material in a plastics manufacturing method.

19. Method according to Claim 18, characterized in that the said plastics manufacturing method is an injection-moulding method.

20. Method for the manufacture of a surfboard according to at least one of Claims 1 to 13, characterized in that firstly the basic body of the surfboard consisting of a plastic upper shell, plastic lower shell and foam located between them is manufactured at least to a great extent, in that cutouts are then made in the said basic body, and in that laminates are then introduced into the said cutouts, which laminates, in the cured state, form a fin box.

21. Method according to Claim 20, characterized by the use of mouldings which preferably consist of aluminium and which are arranged in the said cutouts with the said laminates in such a way that, in the cured state, the laminates have the desired shape after removal of the said mouldings.